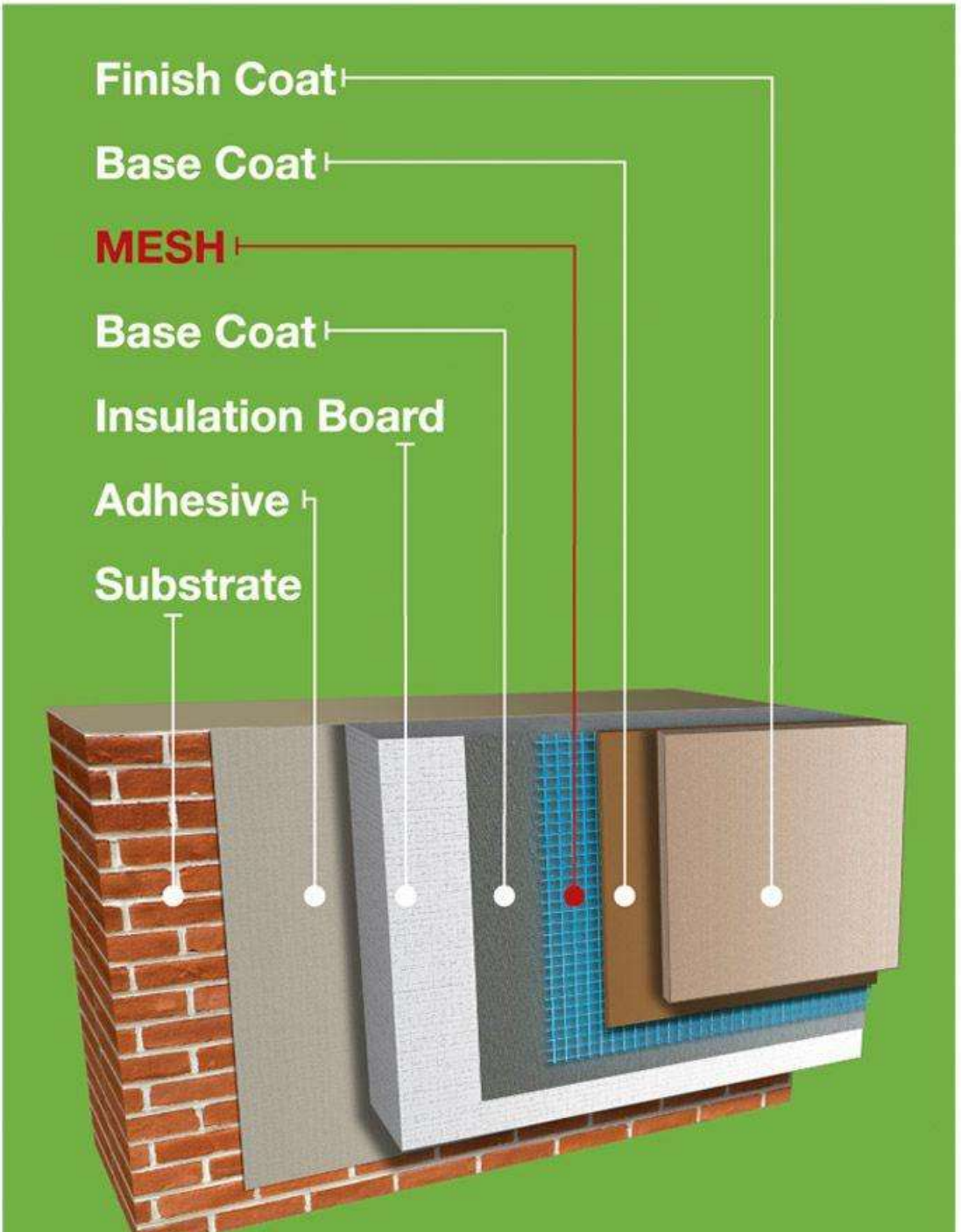APPLICATION GRAPH